

# Public Health Reports

Vol. 56 • JUNE 6, 1941 • No. 23

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## PREVALENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES

April 20—May 17, 1941

The accompanying table summarizes the prevalence of nine important communicable diseases, based on weekly telegraphic reports from State health departments. The reports from each State are published in the Public Health Reports under the section "Prevalence of disease." The table gives the number of cases of these diseases for the 4-week period ended May 17, 1941, the number reported for the corresponding period in 1940, and the median number for the years 1936-40.

### DISEASES ABOVE MEDIAN PREVALENCE

*Influenza.*—The number of reported cases of influenza dropped from approximately 17,700 cases during the preceding 4-week period to 7,530 cases for the current 4-week period, but the current incidence was about 40 percent in excess of the incidence for the corresponding period in 1940, and also of the 1936-40 median figure, which is represented by the 1940 incidence (5,650 cases). The disease is still unusually prevalent in the South Atlantic, West South Central, and Pacific regions, with a slight increase over the seasonal expectancy in the Mountain region. All other regions except the Middle Atlantic reported a relatively low incidence.

*Measles.*—While the number of reported cases of measles dropped from approximately 219,000 for the 4 weeks ended April 19 to 172,184 for the 4 weeks ended May 17, the incidence was still the highest on record. The nearest approach to the current figure was in 1935 when the cases for this period totaled approximately 129,000. In 1934 and 1938, other years in which measles was epidemic, the cases totaled approximately 125,000 and 115,000 cases, respectively. The highest incidence was reported from the Middle Atlantic, East North Central, and South Atlantic regions, but every region except the Pacific reported a very significant increase over the 1936-40 median figure for

this period. For the country as a whole the number of cases was more than 3 times the seasonal expectancy, while the excesses in the various regions ranged from 1.3 times the median in the Mountain region to almost 8 times the median in the East North Central region.

*Poliomyelitis.*—For the current period there were 76 cases of poliomyelitis reported, as compared with 66, 149, and 64 cases for the corresponding period in 1940, 1939, and 1938, respectively. The incidence was slightly above the average seasonal incidence and each region except the New England, West North Central, and Pacific contributed to the excess. While the number of cases in each region showing an increase was small, it represents approximately a 50 per cent increase over the 1936–40 median incidence for the region.

*Number of reported cases of 9 communicable diseases in the United States during the 4-week period Apr. 20–May 17, 1941, the number for the corresponding period in 1940, and the median number of cases reported for the corresponding period 1936–40*

Division	Current period	1940	5-year median	Current period	1940	5-year median	Current period	1940	5-year median
	Diphtheria			Influenza <sup>1</sup>			Measles <sup>2</sup>		
United States.....	856	927	1,486	7,530	5,650	5,650	172,184	44,682	62,581
New England.....	26	26	46	14	12	21	6,623	5,193	5,193
Middle Atlantic.....	140	187	301	81	88	81	54,701	8,123	19,039
East North Central.....	157	144	288	301	444	482	52,497	6,619	6,619
West North Central.....	77	84	102	118	71	251	7,336	4,077	4,077
South Atlantic.....	147	162	208	2,761	2,012	1,835	27,077	2,817	6,126
East South Central.....	68	58	95	343	517	664	9,174	1,559	1,559
West South Central.....	119	159	181	2,701	1,792	1,842	7,589	5,873	3,686
Mountain.....	58	50	50	476	453	414	4,324	4,054	3,412
Pacific.....	64	67	114	745	261	376	2,863	6,367	6,367
	Meningococcus meningitis			Poliomyelitis			Scarlet fever		
United States.....	181	171	233	76	66	66	13,832	19,830	19,830
New England.....	11	9	11	0	1	1	1,206	1,195	1,358
Middle Atlantic.....	38	48	48	8	7	6	4,590	7,663	6,574
East North Central.....	22	11	31	12	7	8	4,189	7,004	7,004
West North Central.....	9	14	19	1	5	3	1,141	1,106	2,437
South Atlantic.....	45	28	47	16	8	12	718	819	767
East South Central.....	32	32	52	11	5	7	714	638	277
West South Central.....	14	19	23	11	6	8	337	207	426
Mountain.....	2	5	7	5	5	3	335	437	469
Pacific.....	8	5	11	12	22	14	602	771	1,014
	Smallpox			Typhoid and paratyphoid fever			Whooping cough <sup>3</sup>		
United States.....	218	280	1,142	377	415	521	21,484	14,357	<sup>3</sup> 14,769
New England.....	0	0	0	27	29	20	1,605	1,081	1,351
Middle Atlantic.....	0	0	0	56	80	71	3,100	2,896	3,607
East North Central.....	59	35	226	38	75	75	4,175	2,612	2,990
West North Central.....	84	107	463	14	19	23	1,749	573	573
South Atlantic.....	10	7	5	91	58	101	3,225	1,573	2,357
East South Central.....	15	28	28	55	48	54	836	673	673
West South Central.....	14	51	61	53	57	119	1,661	1,623	1,623
Mountain.....	8	32	128	18	21	30	1,643	1,223	926
Pacific.....	78	20	143	25	28	42	3,600	2,103	2,103

<sup>1</sup> Mississippi, New York and Pennsylvania excluded; New York City included.

<sup>2</sup> Mississippi excluded.

<sup>3</sup> 3-year (1938–40) median.

*Whooping cough.*—The number of cases (21,484) of whooping cough was approximately 50 percent in excess of last year's figure for this period and also of the 1938-40 average incidence for the period. Each section of the country contributed to the excess except the Middle Atlantic; in that region the incidence was relatively low.

#### DISEASES BELOW MEDIAN PREVALENCE

*Diphtheria.*—The incidence of diphtheria continued at a relatively low level, the number of cases (856) reported for the 4 weeks ended May 17 being about 90 percent of the number reported for the corresponding period in 1940, and less than 60 percent of the 1936-40 median incidence for this period. The situation was favorable in all sections of the country.

*Meningococcus meningitis.*—For the 4 weeks ended May 17 there were 181 cases of meningococcus meningitis reported, as compared with 171, 154, and 233 cases for the corresponding period in 1940, 1939, and 1938, respectively. While the incidence was slightly higher than in each of the 2 preceding years, it was only about 80 percent of the average incidence for this period. The East North Central and South Atlantic regions reported considerable increases over 1940, but in the East North Central region the incidence was below the seasonal expectancy and in the South Atlantic region the number of cases closely approximated the 1936-40 median figure for this period.

*Scarlet fever.*—The number of cases (13,832) of scarlet fever reported for the current period is the lowest reported for this period in the 13 years for which these data are available. The incidence was about 70 percent of that reported for the corresponding period in 1940, which figure (19,830 cases) also represents the 1936-40 median figure for this period. In the East South Central region the number of cases (714) was more than two and one-half times the average incidence for this period, but in all other regions the incidence was relatively low. Very significant decreases were reported from the Middle Atlantic and North Central regions where the incidence is normally quite high at this season of the year.

*Smallpox.*—The incidence of smallpox was also relatively low. The number of cases (218) reported for the current 4-week period was about 80 percent of the number reported in 1940, and only about 20 percent of the 1936-40 median figure for this period. Since smallpox was unusually prevalent in the years 1937-39, inclusive, the median falls within that period, while for the more normal years of 1933-36, inclusive, the average incidence for this period was approximately 750 cases, thus further emphasizing the current low incidence of this disease.

*Typhoid and paratyphoid fever.*—The incidence of this disease was favorable in practically all sections of the country. The 377 cases reported for the current period represented a new low level for this season of the year, the figure being only about 90 percent of last year's low level and about 70 percent of the preceding 5-year average incidence. In the New England region a few more cases than might be expected were reported and in the East South Central region the incidence stood approximately at the normal seasonal level, but in all other regions the incidence was relatively low.

#### MORTALITY, ALL CAUSES

The average mortality rate from all causes in large cities for the 4 weeks ended May 17, based on data received from the Bureau of the Census, was 11.3 per 1,000 population (annual basis). The current rate is slightly below the 1938-40 average rate of 11.7 per 1,000 population.

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#### STATE AND TERRITORIAL HEALTH OFFICERS CONFER ON HEALTH DEFENSES

The State and Territorial Health Officers met, as is their yearly custom, in conference with the United States Public Health Service on April 29, 1941. The alarming nature of events in the Eastern Hemisphere turned this 39th annual conference between these two groups into a council on health as a factor in national preparations for defense. A number of Provincial health officers of Canada were present as guests of the Conference. The Selective Service System sent representatives to the meeting, as did the Army, the Navy, and other branches of the Federal Government, as well as certain non-governmental organizations interested in medicine and public health.

Surgeon General Thomas Parran in calling the meeting to order reported results on the recommendations made by this Conference at its extraordinary session on September 16 and 17, 1940. Under the Selective Service process, all persons are given routine serological tests when they are examined by their local draft boards. All communicable diseases, including tuberculosis and the venereal diseases, disclosed by examinations under Selective Service are required to be reported. Additional funds have been secured to reinforce State and local facilities for public health activities to meet conditions produced by the emergency. A bill pending before the Congress provides substantial appropriations for public health facilities in critical areas. It is anticipated that some action will be taken by the Selective Service System to recognize the work of official public health agencies as an essential part of the program of national defense.

The Surgeon General brought to the health officers of the United States and of Canada personal greetings from their colleagues in England. In place of his accustomed annual summary of public health affairs in the United States, he talked of medicine and public health in England. The text of his remarks follows:

Modern science has extended the area and scope of medical defense against enemy action no less than it has extended the area and scope of war operations. The whole population of Great Britain is in the battle line. The whole medical profession is in the forefront of the battle. As a member of a Commission on Civil Defense, I spent the month of February in Great Britain. This commission was appointed by the Council of National Defense at the request of the General Staff of the Army. Military science has evolved through the centuries, engaging some of the best minds in every country in every age. In Great Britain during the past few years, there has been developed a new science of civil defense just as intricate, just as complicated in its organization and operation as military science. Yet there have been few guideposts, no trained personnel. It is commonly agreed that the system, especially in its medical aspects, accomplishes its purpose through an integration of governmental, professional, and voluntary effort.

In planning civil defense measures, the British made two major mistakes: (1) They assumed widespread and intensive raids immediately at the outset of the war with as many as 30,000 casualties a day needing hospital care. (2) They did not envision prolonged continuous night bombing necessitating the use of shelters as sleeping quarters.

To care for the expected casualties, they doubled the prewar complement of hospital beds throughout the country, by discharging convalescent patients, by evacuating mental hospitals, institutions for the feeble-minded, the aged, etc., by constructing huts, temporary wards frequently on the grounds of an existing hospital, by converting large estates into hospitals, and by "upgrading" existing institutions through the addition of operating theaters, the provision of nursing and surgical staffs, and the like.

In preparation for war, the country was divided into twelve regions with a regional commissioner in charge and with representatives of each Ministry assigned to the commissioner. This decentralization of government was designed to provide independent self-governing areas in the event of invasion or other enemy action which would disrupt communications. The public health, hospital, and medical services are a part of the regional plan. The war has brought large responsibilities to the Ministry of Health and to local health authorities. Under the Ministry, an Emergency Medical Service was organized. An important first step was a cataloguing of all hospitals in the country, voluntary and public. The use to which each should be put was decided. The London area was recognized as a special case and its emergency hospital service was based upon ten sectors radiating fan-like from the center outward and extending well beyond the metropolitan area. In each sector the hospitals are classified into Casualty Clearing Hospitals, Advance Base Hospitals, and Base Hospitals, and additional beds provided for each. The Casualty Clearing Hospitals are near the center of London and other large cities. A large proportion of regular patients were evacuated, especially from the top floors and glass cubicles. In addition a specified number of beds in each are kept vacant for casualties.

The Advance Base Hospitals usually are located 15 to 30 miles from the center of the city. The average capacity is 1,000-2,000 beds. Patients are admitted to these hospitals from the Casualty Clearing Hospitals or occasionally directly from first-aid posts.

Base Hospitals are located 60 to 100 miles out, 1,000-3,000 beds. Patients admitted to these have been classified into specialty groups, orthopedic, maxillo facial, neurosurgical, eye, etc.

The Emergency Medical Service pays the voluntary hospitals £3 per week per bed reserved for casualties. When occupied, the rate is £4 per week. Due to the lack of casualties, this has proven a boon to the voluntary hospital budgets. It should be emphasized that there is in Great Britain now essentially one integrated national hospital service for civilian and military casualties. There are no separate base hospitals for the Army. Since this whole system has been scrambled together, the British doubt that it ever will be completely unscrambled.

The first-aid posts were organized by the municipal or county health authorities under standards proposed by the ministry. In general the cost of ambulances and of the whole air-raid precaution service is reimbursed by the central government. To train the first-aid teams has been a major task. The need for additional nurses has been met by training more than 120,000 nursing aides and auxiliaries.

While total war creates a demand for many skills, the skill in which there is the greatest shortage is that of the doctor. Last week the President responded to the urgent request of the British Red Cross for American doctors. He said: "To any American doctor who is eligible and able to do service this cause presents a splendid opportunity." Assurance that medical aid is promptly available to all casualties is an important consideration in maintaining morale. Day and night in every operating theater, a surgical team stands by. A doctor is on call or working in every first-aid post. Each night a doctor visits all large shelters. Moreover a modern army requires many doctors, especially in mobile mechanized warfare. Doctors are needed too in the large factories and to supply the needs of an expanded Navy and Air Corps. Up to now epidemics have been held in check. Air-raid casualties have been fewer than anticipated and have received prompt attention. To accomplish these results, however, the British doctors have been under a severe strain and medical services for the general population have been diluted. Britain's appeal to the American Red Cross for at least 1,000 of our young doctors is a great opportunity for us to meet a real need. Aside from its humane aspects, American doctors, working side by side with British surgeons and physicians, will acquire valuable experience in the medical techniques of modern warfare. Those who answer this Red Cross appeal will not only have rare professional opportunities but will also have the satisfaction of giving help where it is sorely needed. I feel certain America's doctors will answer this call. The needs are great; the rewards will be greater.

The British have been very intelligent in using their medical resources to the best advantage. No medical or dental student is allowed to volunteer and he is not drafted if he passes his examinations from term to term in an accredited school. This deferment is not a "hiding hole" for slackers. Every such student upon graduation or after one or two 6-month periods of internship is automatically called to service for the duration.

When the system of the Emergency Medical Service Hospitals was established, they were staffed by doctors of all ages who were, in effect, requisitioned from civil practice. In London, for example, the staffs of the teaching hospitals located near the center of the city were dispersed to the peripheral hospitals. The regional, sector, and group hospital officers who themselves had been drawn largely from the staffs of voluntary hospitals, decided who would go to the peripheral base hospitals and who would stay at home. With rare exceptions the assignments were considered as orders. For example, a large proportion of the specialists in Harley Street, with expensive practices and equally expensive offices and other commitments, were recruited for full-time service at a standard pay of £800 per

year. They abandoned their practices, moved 50 to 100 miles to a base hospital and stood by waiting for patients. No casualties appeared during the early months of the war. Naturally some of them drifted back to their accustomed practice. Recognising the situation, the Emergency Medical Service gave these doctors the choice of continuing on a full-time basis or of rendering a part-time service, subject to call at a lower pay (£300 per year) but with the understanding that if enemy action increased and the government required their services full-time, such services would be given at the same part-time rate. Most of the doctors accepted the offers, leaving skeleton staffs, mostly junior men, at the peripheral hospitals. When the heavy blitz started in September 1940, the full-time service of additional doctors was required in the peripheral hospitals and the financial arrangement was readjusted.

Prior to the war there was perfected a medical war organization for the country. At the head was a Central Medical War Committee, composed of the leading physicians, members of the British Medical Association. The Secretary of the Committee is the Secretary of the British Medical Association. To this committee was given the task of registering every doctor and every medical student in the country.

Whenever the military forces requisition a quota of doctors, the Central Medical War Committee allocates the quota to the various communities in Great Britain in proportion to the number of doctors still remaining as related to the population. When the quota is sent to the civil subdivision (county, city, etc.) a local medical war committee, made up of senior doctors, selects the persons who can most easily be spared from present tasks. Doctors in health departments and in important hospital positions are not disturbed. Younger doctors are given preference for service. When a doctor is selected by the local medical war committee he responds in nine cases out of ten. The exceptional doctor may ask for deferment because of some determining personal consideration. His appeal is reviewed. If the decision is not in his favor, he has the right of appeal officially to the Central War Committee in London. Ordinarily, financial considerations are given scant attention.

If we are to learn anything from the British experience on the medical front, we must reorganize our approach to the problem of medicine's contribution to the defense effort. The medical needs of the civilian population should be considered in all recruitment plans, and should be balanced against the military needs. The Health and Medical Committee, under Coordinator McNutt, or a comparable group should be given responsibility for broad national planning. Medical personnel for military, industrial, and civilian health and medical services should be recruited on a quota basis, having in mind the service which each individual physician can render best. Volunteers should not be accepted if they are doing a more essential civilian job. The objective should be to see that each doctor is doing the task for which he is best fitted.

Under a national medical committee, there should be similar committees on medical personnel in each State and in each of the larger communities. These State and local committees made up of senior doctors should decide who should join the services and who should remain at home.

All medical and dental students enrolled, all students accepted for admission and those completing their courses satisfactorily in accredited medical and dental schools should not be drafted until graduation and the completion of an internship, after which those who are physically fit should be required to render a period of service to the government.

The successful local organization of medical defense efforts in Great Britain was possible because, for two decades or more, Britain has had a nucleus of trained medical officers of health. Without this nucleus, effective local medical

defenses could not have been organized. We should take steps promptly to double the number of doctors with training and experience in public health and medical administration. In addition, there should be a comparable increase in public health nurses, sanitary engineers, sanitary inspectors, laboratory technicians, and other technical public health personnel. New training centers will be needed for the training of key persons who in turn will train others who will work under supervision in local communities.

Central planning for medical aspects of civil defense should be done. This should include the survey of existing hospital facilities, area by area, and of those structures which can be converted to hospital use. Estimates should be made as to additional hospital beds needed, area by area. The number and location of the beds will depend upon the position of the area in reference to vulnerability to enemy action.

Time does not permit a comprehensive outline of all needed steps. Some of the factors, however, should include provision of additional operating theaters and their protection against enemy action, the protection of existing hospitals, the consideration of safety from air attack in new hospital construction, the number, location, and equipment of first-aid posts, the provision of ambulances of a standard type with standard fittings, and the earmarking of commercial vehicles for emergency ambulance service, the planning of decontamination centers and training of key personnel in each vulnerable area in antigas warfare. I am not recommending all of the above for the whole country but for those areas designated by competent military authorities as vulnerable to enemy action. In addition, special mobile staffs trained in medical defense measures should be available to aid in the organization of such measures in our territories and possessions and in those areas which we are committed to defend.

It should be emphasized that, in the midst of war, the British have not curtailed but have extended their social insurance and other social laws.

Finally, let me say that we (doctors) in the United States should be inspired by the example of our British medical colleagues. In the midst of war they are planning for the peace. The British Medical Association has set up a Medical Planning Commission to "study war-time developments and their effects on the country's medical services, both present and future." In an editorial comment the British Medical Journal points out that the war has thrown into sharp relief the deficiencies of their peace-time system of administering relief to the sick and of promoting and maintaining the health of the people. "The British Medical Association now proposes to prepare for the return of peace so that medicine may be ready to meet its responsibilities in a world in which many values will be changed, fresh conceptions of society will be formed, and in which new stresses and strains will appear in the moral, material, and economic fabric of the democracy we hold to be our rightful heritage."

I have every confidence that medicine in America will meet whatever demands the future may impose, whether of war or peace.

#### SPECIAL PROBLEMS IN HEALTH DEFENSES

On July 1, 1939, the Public Health Service became a part of the new Federal Security Agency, which was formed to bring the Federal organizations carrying on activities in health into one general fold. Paul V. McNutt, Administrator of the Federal Security Agency, greeted the members of the Conference. He informed them that in surveying the public health problems of the country from his unique

vantage point he would name three which, particularly in this time of crisis, should have the full attention of the health authorities of the Nation. The work of industrial hygiene must be one of their main concerns as industry expands and takes on not only more workers but untried workers. New knowledge in nutrition points the way to a successful program of nutrition, and such a program is highly necessary to our national endurance. The old problem of medical care for those who cannot procure it for themselves takes on urgency as populations shift and people are caught in new surroundings by misfortunes in health.

Mr. McNutt's remarks to the Conference were printed in full in the May 9, 1941, issue of the Public Health Reports.

The remaining formal addresses scheduled for the Conference covered these subjects:

- (1) Activities of the Health and Medical Committee of the Federal Security Agency.
- (2) Pending Federal health legislation.
- (3) Coordination of health, welfare, and related activities in national defense.
- (4) Medical problems in the administration of the Selective Service Act.
- (5) Community health services and facilities.
- (6) Industrial hygiene.
- (7) Venereal disease control.

#### ACTIVITIES OF THE HEALTH AND MEDICAL COMMITTEE OF THE FEDERAL SECURITY AGENCY

Dr. James A. Crabtree, of the United States Public Health Service, appeared before the Conference as executive secretary of the Health and Medical Committee of the Federal Security Agency to give an account of its activities. The European scene, he informed the members, is bringing out in bold relief the importance of physical fitness, mental alertness, adequate nutrition, industrial hygiene, aviation medicine, and public health.

Six subcommittees within the Health and Medical Committee have been set up to represent broad segments of professional and community interests within the field of health—hospitals, medical education, dentistry, industrial health and medicine, nursing, and Negro health.

The hospital problem is one of maintaining some reasonable balance between facilities for the military and those for the civilian population. One of the most important considerations has been the deferment of internes from military duty until they have completed their internship. The Federal agencies having any administrative responsibility

bearing upon such persons are agreed that an uninterrupted supply of medically trained graduates must be maintained to meet the increasing needs, both military and civil, of the country.

Negotiations are under way to obtain a priority status for civil hospitals so that they may purchase essential supplies, more particularly surgical equipment.

Legislation pending before the Congress will provide, if passed, direct Federal assistance to the defense communities most greatly in need. Such assistance will include provision of hospital facilities in critical defense areas where the great influx of people will seriously overburden existing hospitals, if any, in fact, do exist.

The Committee has been making recommendations and promoting action to resolve the problems of industrial health and medicine which are being multiplied by expanding industrial activity. It will be necessary to train large numbers of professional and technical personnel in industrial medicine, hygiene, and nursing. The work of the United States Public Health Service in industrial hygiene must be expanded. It is of particular interest to the national defense to safeguard the health of workers employed in the industrial establishments of the Army and Navy. Many of the newer industrial processes necessitate wider research.

The Public Health Service has placed five teams, and there will be more soon, at the service of State and local health agencies to help resolve their problems of industrial health. Each of these teams consists of a specially trained physician, an engineer, and a chemist, with additional personnel as required.

Industrial nursing is being given a place, long overdue, in the program of industrial hygiene.

To provide a roster of nurses for present and future needs, an inventory of all the Nation's registered nurses is being taken. It is hoped that refresher courses may be arranged for those nurses who have not recently been engaged in their profession.

A circumstance that must be taken into account is that from 30 to 40 percent of American male citizens, otherwise available for military duty, are being found unacceptable because of physical defects, many of which are remediable. A special commission has been created by the Health and Medical Committee to investigate in the light of these findings the present provision and distribution of medical service facilities.

An important field of knowledge in times like these is that of military medicine and hygiene. Research is being directed especially into the fields of aviation medicine and physiology, neuropsychiatry, chemotherapy, tropical diseases, nutrition, industrial toxicology, and the several specialties of medicine and surgery.

The problem of nutrition is different from that of 1917. In those days the Food Administration set up by the Government was concerned with restricting the use of such commodities as wheat, sugar, and fats. Today we have substantial stocks of all essential foods. Research into food values has almost completely transformed our knowledge of nutrition. These two circumstances give us a start on our task of improving the nutrition of the American citizen and at the same time supplying Britain and the allies with the kind and quantity of food they need.

Mobilization and the expansion of industry have so increased the population in many communities that acute problems in health, housing, sanitation, and medical and hospital service have arisen to plague the authorities. The Public Health Service has assigned a Senior Medical Officer to each of the nine Army corps areas to help coordinate the relationship between the civil and the military and facilitate the solution of health problems common to both. Additional Public Health Service personnel are being recruited and trained for assignment to the more critical areas.

The problems in question are essentially local or regional; they are not unique in character; and their resolution is largely a responsibility of the country's health officers.

#### PENDING FEDERAL HEALTH LEGISLATION

Assistant Surgeon General E. R. Coffey enumerated for the Conference pending legislation bearing on public health. Of the 6,061 bills and joint resolutions introduced before the Seventy-seventh Congress between January 3 and April 21, 1941, 56 pertain to public health matters. Some of these are of minor or local interest. A number are of great importance to the conduct of public health in meeting the exigencies of defense.

Up to the time of the Conference the Seventy-seventh Congress had enacted one health measure. H. R. 3204 is the appropriation act providing \$525,000 to enable the Public Health Service to assist the State and local health authorities in health and sanitation activities related to the national health program.

H. R. 3570 (S. 1375 is a companion or similar bill) provides for an appropriation of \$150,000,000 to assist local communities in establishing essential facilities where the need has arisen incident to the national defense program.

H. R. 2475 prohibits prostitution within reasonable distance (as determined by the Secretaries of War and Navy) of military and/or naval establishments. This bill passed the House on April 21, 1941, and was referred to the Senate.

H. R. 4000 and S. 860 provide for control of the sale of alcoholic liquors to the members of the land and naval forces and the suppression of vice in the vicinity of military camps.

S. 509 provides for the general welfare by enabling the several States to make more adequate provision for the control and prevention of industrial conditions hazardous to the health of employees. It provides an initial appropriation of \$1,000,000 to be administered by the Secretary of Labor for assistance to industrial hygiene programs in the States under the supervision of the State departments of labor.

S. 193 provides for compensation for disability or death of workers from silicosis or other dust diseases. These activities are also to be under the administration of the Secretary of Labor.

S. 783 provides for an amendment to the Selective Training and Service Act whereby graduates of medical and dental schools, in lieu of induction into the land or naval forces of the United States for training and service, shall be commissioned as officers in the Medical Department Reserve Officers' Corps and ordered into active military service of the United States. It provides further that medical students, dental students, hospital internes, resident physicians, and teachers in medical and dental schools shall not be ordered to active duty except in time of war.

S. 1375 (introduced April 25, 1941) provides for certain community facilities made necessary by the exigencies of national defense.

#### COORDINATION OF HEALTH, WELFARE, AND RELATED ACTIVITIES IN NATIONAL DEFENSE

Charles P. Taft, Assistant Coordinator of Health, Welfare, and Related Activities, discussed this work.

The activities fall into six major fields, the first of which is health. In the field of health this organization works through the Public Health Service and the public health agencies of the States and localities, with the advisory assistance of the Health and Medical Committee and of medicine in general.

In activities relating to nutrition it works with the Department of Agriculture, with State nutrition committees, and with such local organizations as have been built up by these other agencies.

The field of family security represents quite generally the transient problem, which is being added to by families stranded in areas of defense industries. The Public Assistance Division of the Social Security Board is a coworker in these matters.

In education the most serious problem is being brought about by a displacement, in the course of which school facilities will be lacking for many children. It is fair to say that 150,000 will be affected by next fall. In the Norfolk area, for example, some 3,500 are now living

on Government property. They are either the children of enlisted personnel living on the post or belong to families in Government housing projects not on the tax duplicate.

Recreation is the fifth activity. The task here is to provide opportunities for the men to enjoy their leisure time. A field staff has been established which works to interest the local community or local recreation council in undertaking a program of recreation. Where the community lacks sufficient resources, the United Service Organizations will be called upon to help. This is made up of the Y. M. C. A., the Y. W. C. A., National Catholic Community Service, Jewish Welfare Board, Salvation Army, and Travelers' Aid.

The sixth field takes in the legal and protective services having to do primarily with the problem of venereal disease. In this field the Office of the Coordinator is determined to carry on an educational drive which will reduce the venereal disease rate by reducing the opportunity to contract the disease. Local officials will be asked to enforce to the full the local and State laws on prostitution, and an attempt will be made to build up public opinion for such enforcement.

The protective side of the program will be directed toward the juveniles. Detention houses will be maintained for the girls until arrangements can be made to send them back to their own communities or otherwise to take care of them. Every effort will be made to rehabilitate these delinquents. The Children's Bureau is giving close cooperation in this work.

#### MEDICAL PROBLEMS IN THE ADMINISTRATION OF THE SELECTIVE SERVICE ACT

This discussion was given by Lieutenant Colonel Richard H. Eanes of the Medical Division of the Selective Service System.

Findings from the Selective Service process show the venereal diseases to be first among the medical problems, as they have been during so many of the world's disturbances and wars. Syphilis has been one of the problems of the Selective Service System, particularly in the southern States. In one State, young Negro men with positive serologic reactions represent 29 percent of those examined, and this percentage varies to somewhat under 20 percent in the different southern States.

The time may not be far distant when it will be necessary to omit the requirement excluding men having positive serologic tests from the Army. If they are adequately treated and show none of the sequelae of syphilis, it is believed that they can do service. For those few dangerous cases that slip by and are inducted, a register of syphilitics can be established and adequate treatment completed.

Gonorrhoea has been giving some trouble, but with the treatment now provided by chemotherapy it should be possible to reduce the incidence of this infection to a minimum.

Conferences were recently held in Montgomery, Alabama, and Richmond, Virginia, on the problems being presented to the Selective Service authorities by the venereal diseases. It was proposed that a close liaison be maintained between the State health authorities and those carrying on the medical work of Selective Service and induction. The State health authorities would be informed almost immediately of any infections coming to the knowledge of the latter. When these plans are put into operation, the State authorities, working in some cases with the Public Health Service, will arrange, in accordance with the laws of the State, for treatment of the individual and further will try to seek out the source of his infection.

As to tuberculosis, the rejections to date are hardly as high as had been expected from the 1917-18 rate. It is too early, however, to quote figures on this disease.

Prehabilitation is a term used for the voluntary correction of remediable physical defects discovered in himself by a prospective selectee. If he is not able financially to do this himself, he should be referred to some public agency. An analysis of a group of I-B cases, subject to limited military service, indicated that the majority of them could be rehabilitated and rendered fit for Class I-A. The local board chairman could help along both prehabilitation and rehabilitation if he had a list of all health facilities in the vicinity available for this work. The State health officer could be responsible for this list so that the local boards might use it with assurance in advising selectees.

The supply of medical personnel is a subject of great interest. It is judged that 3,500 physicians fit for active military service will be needed each year for replacement in the Medical Corps of the Army. The Office of the Surgeon General of the Army estimates that the present pool of reserve officers fit for active military duty will be completely exhausted before the end of 1942. It will then be necessary to depend upon the medical graduates of 1941 and the succeeding years.

It goes without saying that the Surgeon General of the Army considers the initial year's internship a part of the basic training of a doctor. Graduate students or young doctors who apply for a commission in the Medical Corps Reserve and meet the physical and other qualifications will be given a commission. They will be carried administratively in a War Department pool for their initial year of internship and will not be called to active duty until that is completed.

According to the latest information available, the men summoned before the Selective Service local boards are being classified about as follows:

Class I-A, available for general military service, 68 percent of those who are being physically examined.

Class I-B, available for limited service, 12 percent.

Class IV-F, disqualified for any military service, 20 percent.

Of the 68 percent sent to the induction station, about 13 percent are being rejected as unfit for general military service. Usually the borderline cases are given limited service classification.

This means that approximately 40 percent of all men examined by Selective Service local boards are being rejected for general military service. About one-half of these, or 20 percent, are in the limited service classification, the major portion of whom have defects that are remediable.

Of the 32 percent who are rejected after physical examination by the Selective Service local boards, 18.6 percent are rejected for defects of the teeth, 10.6 percent for defects of the eyes, and 10.1 percent for cardiovascular defects. Of the 13 percent rejected at the induction stations, 19.3 percent are rejected because of defects of teeth, 13.3 percent because of eye conditions, and 10.5 percent because of mental and nervous defects.

The groups of defects of the eyes and teeth, hernia, and over- and under-weight account for a considerably higher proportion of the total number of defects in the limited service classification than in the disqualified classification.

The general discussion which followed these remarks by Lieutenant Colonel Eanes turned upon two classes of persons infected with the venereal diseases. One comprises those men with acute gonorrhea who are sent home on temporary deferment and told to report back when they are cured. Such men could spread the infection, and by becoming reinfected themselves stay out of service indefinitely. This contingency, Colonel Eanes informed the meeting, gave rise to the suggestion at the conferences in Montgomery and Richmond that the Selective Service officials report cases as quickly as possible to State and county health officers so that the men may be put under treatment with sulfathiazole.

The other group includes those men who are told to report back when they have had a negative serologic test and do so after 6, 8, or 10 weeks of treatment under the impression that they are cured. Colonel Eanes said that, in working on this problem, it is necessary to depend upon State health officers, county officers, and all doctors who have knowledge of the situation. It will be their duty to communicate what information they have to the Corps surgeons as quickly as possible.

## COMMUNITY HEALTH SERVICES AND FACILITIES

Assistant Surgeon General Joseph W. Mountin, in opening this discussion, likened the problems of defense areas to those of boomtowns of former days. The elemental functions of health departments become paramount. They must provide sanitary facilities, safe water supplies, protection of food supplies, and other fundamentals that may be inadequate or entirely lacking. Law enforcement will be involved as distinct from educational visits of the nurse or inspector.

We lack at present some scheme of licensure with which to control the situation. The unsightly conditions that characterize so much of the mushroom development are only what we might expect in areas where there is no licensing of establishments. It is not unlikely that health departments will be obliged to operate facilities such as hospitals or health centers. Where the operator of the water plant or the sewerage plant is called away to military duty, an engineer from the health department may have to take over. This sort of thing happened in 1917.

Health departments are, unfortunately, restricted in legal authority. This lack stood out as a complication when the hospital bill was being considered last year. Very few States have established any authority to operate State and regional hospitals, and not infrequently cities and counties cannot combine to operate such facilities.

This same lack of authority will interfere with the development of water supplies in some of these unincorporated areas.

The appropriation of \$525,000 made available for the period from March 1 to June 30 of this year is being devoted to this limited job of what is called emergency health and sanitation in defense areas. It is hoped that a corresponding \$100,000 a month, or perhaps more, will be made available for the coming fiscal year.

It was largely on the suggestions of the health officers that the money has been employed in recruiting personnel and giving them a short period of orientation. These people are professionals—doctors, nurses, engineers, and laboratory workers. People below the professional grade should be employed with State and local funds. The new workers will be under the direction of State and local health officers, but will be paid by the Federal Government. The Government must retain the authority to reassign them to other areas in the event that acute needs develop in certain localities.

The cooperative partnership between the Federal and State governments will work out these medical and health aspects of national defense. Gradually, as the tax structure is built up in communities, a larger measure of community support will be expected. A considerable amount of cantonment pay rolls and industrial pay rolls will be spent in the local communities. This money should build up resources

to support community programs, some of which will conclude with the emergency, and others to be continued after it is over.

The discussion following Dr. Mountin's remarks had to do mainly with personnel. Two questions were posed. Would the Public Health Service in recruiting its new personnel take key persons away from State health departments? Could the health departments take the "next best" if that is what they had to do to meet their assignments?

Dr. Mountin answered that an effort is being made to use the money to recruit new people, that those in charge would do their best not to take people now employed in State or local health departments, but that they are obliged to take those who are on the rolls of the Federal Civil Service Commission. If a person is employed by a State and is on the Federal Civil Service roll, they cannot promise to assign him to the place of his present employment. Their plan has to be mobile to be successful.

With respect to the States' choice of personnel, Dr. Mountin said that it was hoped that they would adhere to the merit system and the qualifications set up by the State and Territorial health officers. Some leeway may be necessary in securing personnel under these unusual circumstances. It is hoped that the Committee on Personnel will pass a resolution to allow some leeway, to be used with caution and judgment and only to meet urgent conditions.

The other problem brought up in the discussion concerned water supplies and sewage disposal in those areas becoming thickly populated outside incorporated city limits. The Conference was informed that no money was available from present appropriated funds, but that the pending Community Facilities Bill provides funds that might be used for such facilities.

#### PROGRESS IN THE INDUSTRIAL HYGIENE PROGRAM IN NATIONAL DEFENSE

A discussion of this subject was presented by Dr. J. G. Townsend, Chief of the Division of Industrial Hygiene of the National Institute of Health.

He remarked that, although we know today how to control the majority of industrial health hazards, the application of that knowledge lags far behind. A large proportion of industrial workers have always worked under conditions unfavorable to health and well-being. Even in normal times, the loss of time due to all types of disabilities in industry amounts to the staggering total of 350,000,000 days a year, or considerably more than 1,000,000 work years annually. This burden must be reckoned with in any production schedule.

Problems of industrial hygiene will increase as industry expands. The new workers, many of them women, who replace those called

to military duty will be on the whole less able-bodied and less accustomed to an industrial environment. The problem of fatigue will be greater. Hazardous chemicals will be used without predetermination of their toxic nature. Crowding will beget loss of vigilance and an increase in accidents.

The Health and Medical Committee of the Federal Security Agency has appointed a Subcommittee on Industrial Health and Medicine. This subcommittee recommended that the Division of Industrial Hygiene of the National Institute of Health assume leadership in meeting the problems of this emergency. This Division has had more than 26 years of experience in research and related problems and has the personnel, the facilities, and the established relations with governmental and other agencies to carry on the work.

It is now entering into an even closer working relationship with the various State industrial hygiene units, the United States Department of Labor, the Council on Industrial Health of the American Medical Association, with other agencies both governmental and nongovernmental, with industry, and with labor itself. The program now being applied in each important industrial area is directed toward the following objectives:

1. The evaluation and control of the various health hazards resulting from exposure to dusts, fumes, gases, vapors, and other materials.
2. The provision of advisory services to industry in connection with the construction of new plants and the renovation of old plants, so that adequate facilities for health and safety may be included.
3. The promotion of physical examinations and medical services for the workers in order that the benefits of preventive and curative medicine may be applied promptly to their individual problems of health.
4. The control of communicable diseases among workers through a control program developed in connection with the general public health services of the community.

This program entails supplementing the facilities of State and local units by expansion of the services now provided by the Division of Industrial Hygiene. With funds recently made available by the Congress, the Division has put into the field mobile units, consisting of a physician and an engineer, to work in key defense industries in cooperation with the State departments of health.

Fundamental to the whole program is the research work in progress at the laboratories. Now under investigation are such substances as toluol, lead azide, solvents, metals used in airplane construction and munitions, and components of synthetic rubber and plastics. Standards for benzene, hydrogen sulfide, carbon disulfide, and carbon monoxide have been established. These standards define the amount

of toxic substances which may be permitted in the air of working places without harm to the workers.

The problems of aviation medicine constitute an important line of investigation. A study is being made of the efficiency and safety of oxygen administration apparatus at high altitudes and low temperatures.

These are only examples from the many activities with which the research section is concerned.

The resources of the Division are limited, and it is highly important that each State, especially those with large industrial populations, should direct all the funds it can spare into industrial hygiene activities. The industrial hygiene work is important, not just as an emergency program, but as an integral part of our national life.

#### PRESENT STATUS OF THE VENEREAL DISEASE CONTROL PROGRAM IN MOBILIZATION AND NATIONAL DEFENSE

Assistant Surgeon General R. A. Vonderlehr opened this discussion. He pointed out that the control of the venereal diseases has been affected in two ways since the beginning of the national defense program. The Selective Service System has made possible a much more exact determination of the prevalence of syphilis, and has brought a larger number of men infected with syphilis and gonorrhea under treatment than ever before in the United States. The second influence came from the instructions by the Congress that existing civilian facilities be intensified and adapted to the urgent new conditions.

Preliminary reports from 41 States and Territories show that among the first 950,000 men examined approximately 50,000 had positive tests. They also show that substantial numbers of men with the lesions of early syphilis and gonorrheal infections have been rejected by local Selective Service medical boards and Army induction boards.

Twenty States have reported on follow-up of selectees. Of selectees in these States, only 43 percent have been brought in for physical examination and less than 31 percent have been classified as under medical care for syphilis. No definite reports are yet available on the follow-up of men rejected for gonorrheal infections.

Venereal disease clinics throughout the Nation lack follow-up workers. At the beginning of the present fiscal year, according to reports from State health officers, at least one-half of the venereal disease clinics depended for contact-tracing and case-finding on part-time and untrained investigators, and two-thirds of the remaining clinics had no follow-up personnel. No clear-cut procedure has been instituted for referring back to Selective Service boards men who have been rendered noninfectious by adequate therapy. This

inadequate system is particularly unfortunate in gonorrheal deferments, for with modern chemotherapeutic treatment it should not be necessary to defer such selectees more than one month.

It is recommended that:

1. All selectees rejected because of such infection be followed up and given treatment. If possible, their contacts should be located and examined, and provided treatment where necessary.

2. Special investigators be assigned to study the results of all examinations and laboratory tests performed on selectees, to appraise the efficiency of the follow-up system, and to hold infected persons under treatment until rendered noninfectious.

3. A system be set up for referring back to Selective Service boards men originally deferred for syphilis and gonorrhea and subsequently rendered noninfectious by adequate treatment.

4. Sufficient trained personnel be provided to trace those supposedly infected civilian contacts of patients in the military personnel. This would be done through the cooperation of all military medical and civilian health authorities.

5. A program be instituted to apply the above methods and techniques to the control of syphilis and gonorrhea in industry and especially in the national defense industries.

6. An effective educational program be developed. This would be directed to informing the public and the armed forces as to the need for follow-up and for treatment, and also to discouraging those infected from seeking treatment from quacks or other unlicensed sources.

Evidence shows that late and late latent syphilis now receives more attention in public clinics than is justifiable from a public health standpoint. It is essential that everything possible be done to provide adequate medical treatment for early patients and to discourage the attendance of the others beyond the time when adequate treatment has been given. This idea should also guide the case-holding.

Facilities should be provided for the clinical management of gonorrhea in all venereal disease clinics throughout the United States. Almost 30 percent of the Nation's venereal disease clinics do not admit patients with gonorrhea.

Indications are that State and local health departments are distributing sulfonamide compounds which are outmoded. In spite of the proved efficacy of sulfathiazole for gonorrhea, only 200,000 tablets of this compound were reported purchased and distributed by State health departments during the first half of the present fiscal year, as compared with three and one-quarter million sulfanilamide tablets.

Facilities should be developed for the culture of the gonococcus in public laboratories, as the culture remains the most efficient method for the determination of cure in this disease.

Records should be kept on gonorrhoea so that progress made from year to year may be determined and needs ascertained.

In the programs to control the venereal diseases, the educational and public relations techniques are exceedingly important. The Public Health Service is substantially increasing its venereal disease educational services to the States. Trained workers are available upon request who will collaborate on State and local activities. A matter for concern has been the quality of the educational materials put out by the States and the organization of programs.

Broad programs of public health education, utilizing materials produced by both Federal and State organizations, would benefit the general health and at the same time aid the control of the venereal diseases.

A measure of vital importance to the control of these diseases, with or without considerations of national defense, is the training of personnel, both old and new, who are otherwise qualified.

The discussion following these remarks brought out a question as to the reliability of serological tests. Dr. Vonderlehr replied that reliability of performance of serological tests for syphilis is rapidly increasing in the United States. Dr. Arthur McCormack, of Kentucky, rose to give credit to the Public Health Service for the improvement in the quality of serological tests resulting from the annual examinations given the laboratories.

#### COMMITTEE REPORTS

##### Committee on Hospital and Medical Care

The considerations of the Committee may be summarized by this question: What role will public health agencies play in the increasing governmental participation in hospital and medical care?

Some of the proposals now pending to provide Federal aid in defense areas in building and maintaining such facilities as hospitals, or in providing medical care to special groups, such as workers in defense industries, are certain to go into effect in the near future. It is believed that most State health departments do not have adequate authority to permit Federal agencies to allocate funds to them for reallocation to minor civil divisions for these purposes. In such cases, Federal agencies will be obliged to deal with other State agencies or directly with the localities concerned. This Committee last year drew the attention of the Conference to the need for "a single health agency charged with all governmental functions that are predominantly medical." In line with this statement and the foregoing considerations, the Committee adopted the following resolutions:

*Resolved*, That this Conference strongly recommend that the expenditure of Federal funds for health facilities and medical care be administered by the Federal Security Agency.

*Resolved*, That the provision of health facilities and medical care is an important interest of State health departments and that the Conference urge its members to secure for their departments the necessary authority, first, to construct and operate health facilities such as general hospitals, health centers, water supply, and sewerage systems, or to supervise their construction and operation by other State and local agencies; and second, to participate in programs of general medical care.

In view of the fact that some 40 percent of the men examined have been found physically unfit for full military service, the Committee wished to reiterate its resolution adopted by this Conference on September 17, 1940, and presented the following resolutions:

*Resolved*, That this Conference recommend to Congress that legislation be enacted which will permit the acceptance as beneficiaries by the United States Public Health Service of men examined under the Selective Service Act of 1940 and placed on deferred status because of correctible physical defects or ailments, and who make application to the Surgeon General of that Service, and that a suitable appropriation be provided for this purpose.

*Resolved*, That the Conference of State and Territorial Health Officers is much concerned by the health conditions revealed by the physical examinations made under the Selective Service Act and urges Federal and State health agencies to institute a program designed to prevent, or discover and treat defects and ailments among persons of both sexes now below draft or working age so that in the future persons reaching military or working age will be better equipped physically and psychologically to take their parts in civilian or military life.

#### Committee on Venereal Disease Control

This Committee submitted its report in five sections:

#### *A Plan to Insure Adequate Venereal Disease Control Measures for Personnel Discharged from the United States Army, Navy, and Coast Guard*

In spite of the most effective venereal disease control program which can be developed under existing conditions, it is certain that a considerable number of the men taken into and discharged from the Army under the Selective Service System during the next five years will be infected with the venereal diseases during their service period. A plan was drawn up by the Committee to insure adequate treatment of men infected with the venereal diseases in the military services and to prevent the transmission of such diseases by these men upon their return to civilian life. The six recommendations which constitute this plan are offered to the Secretary of War, the Secretary of the Navy, and the Federal Security Administrator.

1. A thorough physical examination to detect the venereal diseases, including a serologic blood test for syphilis and including also, if clinically indicated, necessary microscopic smears and culture examinations for the detection of the gonococcus, should be done on each man before his discharge from the military services.
2. The administration before discharge of a minimum of 20 doses of one of the trivalent antisyphilitic arsenical drugs and 20 doses of one of the heavy metals

by the medical corps of the respective military service to each man found to be infected with syphilis.

3. The administration before discharge from the military service of two grams of sulfathiazole per day for ten successive days to each man found to be infected with gonorrhoea.

4. The adequate treatment before discharge of all men found to be infected with chancroid, granuloma inguinale, and lymphogranuloma inguinale to insure that such infected men are rendered incapable of transmitting their infections to others.

5. Before discharge from the military service of any man infected with the venereal diseases, the responsible medical corps should communicate with the health department of the State to which the infected man expects to proceed, to obtain from the State health officer assurance that free treatment facilities will be available at his new place of residence.

6. If no health department facilities for the free treatment of such infected man are available, the man should be retained by the respective medical corps until there is reasonable assurance that he has recovered from his infection.

### *Administrative Costs of the Venereal Disease Control Program*

A careful study of administrative costs for venereal disease control work has been completed by the Public Health Service, at the request of the Congress, and a uniform plan drawn up to include provision of the following personnel and services:

1. A State Venereal Disease Control Officer. The travel allowance of such officer should not be included as an administrative item because, in most States, this officer performs some duties connected with field work.

2. A clerical assistant to the Venereal Disease Control Officer. The clerical assistant should perform those duties pertaining to the Venereal Disease Control Officer's correspondence, filing, or other general office work in this section of the health department.

3. Any other clerical or stenographic personnel at the State level, provided the major portion of their activities is concerned with general office work under the immediate supervision of the State Venereal Disease Control Officer. This item includes personnel concerned with the accounting of funds, but excludes personnel concerned with statistical activities, since the latter are included in the category of personnel performing duties connected with consultation and dissemination of technical information.

4. All activities concerned with the administration of the merit system on the State level.

5. A proportion of the items budgeted for office supplies and office equipment used primarily by personnel classified as administrative. These costs should be indicated in terms of the percentage of the total central office costs as well as in terms of an actual monetary figure.

This Committee recommended in general that the total cost of administering the venereal disease control program should not exceed five percent of all funds expended for this part of public health work in States with a population greater than one million and ten percent in States with a population of one million or less.

*Proposed Revision of the Regulations Requiring Cooperation of Local Law Enforcement Authorities in the Repression of Prostitution Before Federal Funds Are Reallotted to Local Health Departments for the Control of the Venereal Diseases*

Since a year ago, when members of the 38th Annual Conference of State and Territorial Health Officers recommended the repression of prostitution and defined the responsibility for the application of repressive measures, the problem of prostitution in the United States has become even more grave. In some areas where armed forces or national defense workers are concentrated, recent studies indicate the presence of prostitutes equivalent in number to one percent of the population. To encourage the repression of prostitution because of its public health importance and to inform public-spirited citizens of the incompatibility of tolerated prostitution and effective venereal disease control measures, the following revision of Section XV, paragraph 7, of the Regulations Governing the Allotment and Payment of Venereal Disease Control Funds is approved by this Committee and submitted with a recommendation that it be adopted by the members of the Conference:

7. In reallotting funds under this act for local venereal disease control services the State health officer shall give due consideration to the relatively higher prevalence of syphilis and gonorrhea in urban areas, provided that after conference with the local health officer the State health officer shall require from the agency of local government responsible for law enforcement against prostitution within the area a written statement that during the period when Federal funds are made available a program of repression of prostitution will be enforced. This statement from the director of the agency of the local government responsible for law enforcement against prostitution shall certify that during the life of a local venereal disease control budget, which includes Federal funds, such law enforcement authority will vigorously enforce all local and State laws prohibiting prostitution, procurement, solicitation, and assignation. Failure of the responsible authority to enforce such laws during the life of the venereal disease control budget will disqualify the local health department for further reallotments of Federal funds for venereal disease control work until satisfactory proof is produced by such local authority that said laws are actually being enforced.

*Induction and Treatment of Selectees Infected with Gonorrhea*

Whereas selectees called under the Selective Service Act and found to have uncomplicated gonorrheal urethritis are not accepted for induction into the United States Army; and

Whereas this policy results in turning back into the civilian population infected persons by whom the infection may be spread; and

Whereas modern methods of treating this disease result in prompt cures in a high proportion of cases: Therefore be it

*Resolved*, That it be the opinion of the members of this Conference that the objectives of the Selective Service Act and the health and welfare both of persons called for service thereunder who are found

infected with uncomplicated gonorrheal urethritis and of the civilian public could best be served if such selectees were promptly inducted into service and treated; and be it further

*Resolved*, That the members of this Conference recommend such action and that copies of this resolution be sent to the proper officials of the War Department and the Selective Service System.

*Reciprocity Between States in Premarital Examinations to Detect Syphilis*

A total of 24 States have enacted statutory provisions requiring premarital blood tests for syphilis. In 8 additional States similar provisions are pending. Compliance with such provisions should be as free from inconvenience to the general public as is consistent with the duty imposed.

Inconvenience at present is laid upon persons making application for marriage licenses in jurisdictions other than that of their residence. Reciprocity between States in premarital serologic examinations is definitely interdicted by the wording of the statutes in certain States. In others, especially in those in which the actual operation of the provisions of the law is placed under the guidance and supervision of the health departments, a program of full and free reciprocity would seem to be entirely feasible.

It is therefore recommended that full reciprocity be extended by the States in the matter of acceptance of premarital serologic reports in all instances in which the procedure is not specifically interdicted by the wording of the various statutes.

Reciprocity should also be furthered by the delegation of broad powers to State health departments in matters pertaining to the practical administration of the enactments of premarital legislation under advisement at this time.

**Committee on the Social Security Program**

Since the passage of the Social Security Act in 1935, this Committee has made from time to time recommendations for simplifying the procedures used in bringing the benefits of this Act to the people of the several States. As a result of its deliberations in this sixth year of the operation of the Act, the Committee reported back to the Conference:

Your Committee recommends the inclusion of items in budgets to pay expenses of individuals selected by the State health officer to attend such specified regional and national meetings as are approved by the Surgeon General.

It is recommended that the State health authorities in each State consider the establishment as soon as practicable of an adequate formula for the allotment of funds within each State.

It is recommended that no Social Security funds be used for the payment of salaries for State health officers after the next regular session of the legislature in each of the respective States.

It is recommended that the percentage of available appropriations allotted to each State be changed so that for "population" it will be 27.5 percent, for "special health problems" 45 percent, and for "financial needs" 27.5 percent.

It is recommended that there shall be included under "special health problems" a new sub-section (e):

(e) National defense needs, including the environments of Army posts, cantonments and maneuver areas and defense industrial areas.

It is recommended that any unexpended balances from allotments to States under the present regulation for the current or subsequent fiscal year be reallocated under the new sub-section (e) of Section (2) for defense health needs.

Your Committee has considered the several addresses that have been made in regard to emergency health and sanitary problems arising from national defense needs, and it urges consideration by each State health authority of the adjustment of resources and program to defense needs, which are paramount.

The Committee recommends that the State health authorities confer with their respective Governors in regard to the problems of law enforcement, the passage of county and rural zoning laws and the passage of legislation providing sanitary control through permit or license by State or local health departments.

It is further recommended that each State health department arrange for a conference with other interested agencies in a planned development for a civil defense program, and that adjacent States prepare to pool their resources in the development of such a program.

#### **Joint Committee on Professional Education and Qualifications of Public Health Personnel**

During the past five years a nucleus of well-trained public health personnel has been developed which has contributed to the better organization of State, Provincial, and local health departments and to the extension of modern public health services into many new areas.

At the present time the recruiting of personnel for the national emergency, along with the continued necessity for safe-guarding nationally accepted standards of personnel qualifications adds to the problem of training public health personnel. The Committee in its discussions accented the value of the orientation or introductory program for public health personnel now being carried out by the United States Public Health Service. The Committee endorsed the act of university schools of public health in establishing special courses of training in industrial hygiene, venereal disease control, public health administration, and other specialized fields of public health practice.

The Committee reported that subcommittees had been appointed to confer with appropriate groups to set up standards of education and other qualifications for vital statisticians, public health educators, and public health laboratory personnel.

The Committee recommended that, when qualifications for these additional groups have been established, the United States Public

Health Service publish a special bulletin on the subject of training personnel under Title VI of the Social Security Act and under the Federal Venereal Disease Control Act.

The Committee, holding the principle of the merit system in high favor and wishing to safeguard standards during this emergency, suggested the desirability of establishing interim classifications with qualifications reasonably attainable under existing circumstances.

#### Committee on Records and Reports

This Committee has been working to simplify the system of reports within Federal and State governments. The work is still in the stage of study and investigation of forms now used and of the purposes which they serve and could serve.

In the meantime, the Committee recommended that the United States Public Health Service and the United States Children's Bureau be urged to make every reasonable effort to provide consultant service on records, reports, and correlated administrative practice to State health departments.

The Committee reaffirmed its previous recommendations regarding the elimination, simplification, and consolidation of activities, budgets, and financial report forms.

#### Committee on Interstate and Foreign Quarantine

The formal report from this Committee was not received in time to be included in this abstract of the proceedings of the Conference.

It is understood that the Committee discussed at some length plague suppressive measures, particularly as they bore upon the problem of national defense in the western States.

It is also understood that the Committee took up the problem of psittacosis, with the members agreeing that each State should adopt regulations against bringing in birds of the psittacine variety.

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### METHODS FOR CONTROLLING *AËDES AEGYPTI* MOSQUITOES WITH *GAMBUSIA HOLBROOKI* MINNOWS AT KEY WEST, FLORIDA

By JAMES H. LE VAN, *Passed Assistant Sanitary Engineer, United States Public Health Service*<sup>1</sup>

The climate of Key West, Monroe County, Fla., where the *Aëdes Aegypti* Control Unit of the Public Health Service was detailed from December 1938 to April 1939, is such that there is a year-round infestation of the domestic mosquito, *Aëdes aegypti*, the carrier of yellow fever and dengue fever. Unprotected and improperly pro-

<sup>1</sup> Formerly Officer in Charge, *Aëdes Aegypti* Control Unit.

tected cisterns are the principal breeding places of *A. aegypti* and control of the mosquitoes presented the principal problem.

At the time of the present study the city had no public water supply. Most of the water is obtained by the collection of rainwater in cisterns, barrels, crocks, and other containers. Some drinking water is taken from shallow wells dug to a stratum of but slightly brackish water only a few feet below the ground surface. Water from this source is often used for other purposes to conserve rainwater so that it is not uncommon to find wells and cisterns on the same premises.

Although top-feeding *Gambusia* minnows had been used successfully in open containers in malaria control (1), and in yellow fever control in Tampico, Mexico, (1) and in Guayaquil, Ecuador, (2) a different situation existed in Key West than in most cities where these fish had been used. Experiments of others had shown that *Gambusia* fed mainly by attacking food while it is in motion. It had been concluded that these fish would be unable to see to feed if introduced into cisterns with almost no light in them.

The Unit began experiments with *Gambusia holbrooki*, the species found in five small fresh-water ponds on Stock Island adjacent to Key West. They were placed in one-half-gallon glass jars in a dark room and were fed *aegypti* larvae in total darkness. A faint red lamp was used to examine the results of feeding.

These experiments disclosed that the ability of *Gambusia* to eat larvae seemed to depend more on their appetite or capacity than on the amount of light present. In this series of experiments none of the minnows "ate themselves to death" in the presence of more than enough food, a statement that has been made about tropical fish used in *aegypti* control (3).

A brief test with *Mollienesia latipinna* indicated that darkness did not affect their ability to eat, but they are reputed to be mainly herbivorous, eating mosquito larvae only in the absence of plant food. Because of this characteristic they would be "virtually valueless as a destroyer of mosquito larvae" (4). Another reason for not using them is that they are highly susceptible to handling and chlorination injuries.

It was known that McCready of the Florida State Board of Health had placed small numbers of *Gambusia* in several of the Key West cisterns in 1935. Fish still were alive in many of these cisterns that were examined by our inspectors (early in 1939). No mosquito larvae could be found in cisterns in which *Gambusia* were seen. As a Works Progress Administration project, the Monroe County sanitary officer had been using a small crew of men to place *Gambusia holbrooki* minnows in Key West cisterns.

On the strength of this information it was decided to stock every cistern in the city with minnows unless it was mosquito-tight or unless the householder absolutely refused and would agree only to having his cistern oiled regularly by one of our inspectors. It was decided to introduce one fish per square foot of water surface, or to place 50 fish in an average cistern. Later this figure was reduced to 40 fish in order to speed up the work to completion. A total of 95,041 *Gambusia* minnows was placed in 2,754 containers.

TABLE 1.—Number of containers stocked with *Gambusia holbrooki* minnows, January to April 1939

Type of container	Number
Cisterns.....	1,887
Wells.....	717
Miscellaneous, including rain barrels.....	150
Total.....	2,754

It was found that the easiest way to catch minnows in the ponds was to lower a fine mesh dip net into the water, to sprinkle bread, meat, or crawfish particles on the water, and then to raise the net after the fish in the vicinity had been attracted by the food and had begun to feed.

After the fish were caught they were acclimated for cistern stocking by being placed successively in containers of pond water, a mixture of pond and cistern water, and cistern water.

Care was necessary in handling them to minimize loss. The pregnant females were more susceptible to handling and chlorination injuries than the males. Claims have been made that females could be handled without injury when being transferred but that males required exceptionally careful treatment (5). The inspectors engaged in cistern stocking found that with reasonable care neither males nor females appeared to be harmed and they could be poured into cisterns or introduced with soup ladles through small openings when necessary. Even with careful handling there was some loss of fish daily.

To protect against possible introduction of contamination into cisterns which were being stocked with *Gambusia holbrooki*, the Monroe County sanitary officer had placed the minnows overnight in a bath of chlorinated water before transferring them to cisterns. This practice was continued by us. Experiments were made to find the tolerance of these minnows to chlorinated water, and a chlorine dosage that would give a residual of 0.1 to 0.15 part per million was found most satisfactory. The fish are as susceptible to overchlorination as they are to overcrowding.

While cistern stocking was in progress it was discovered that *Gambusia* could not clean up a cistern that was heavily infested with

mosquito larvae. When such an infested cistern was found, the surface of the water was sprayed with kerosene, and *Gambusia* were introduced after the kerosene had killed the larvae. A film of kerosene on the water surface did not seem to harm the *Gambusia*.

#### PERSISTENCE OF *GAMBUSIA HOLBROOKI* MINNOWS

Eight months after the cisterns had been stocked, the Monroe County sanitary officer reported "the fish are doing remarkably well in the cisterns and wells. A very low percentage of cisterns have to be restocked after each round" of house-to-house inspections (6).

A careful inspection was made of the Key West cisterns in May and June 1940 in order to observe as accurately as possible the persistence of the *Gambusia* minnows.

Of 2,376 containers that were reinspected, 1,105 contained fish, and mosquito larvae were seen in only 8 of these containers. Fish were found in roughly half of the cisterns inspected. Many of the cisterns had been pumped dry or had been pumped out for cleaning and had not been restocked with fish when refilled. Our educational efforts when the cisterns were stocked with fish in 1939 have done some good since it is not infrequent for the Monroe County sanitary officer to receive a request from a householder for *Gambusia* minnows to restock his cistern after it has been cleaned.

Fish have disappeared from many wells because it is easy for children and others to remove them. It is not surprising that fish were seen in only two of the rain barrels that were inspected because owners usually were not interested when the barrels were stocked with fish in 1939.

TABLE 2.—Number of containers with and without minnows when reinspected in May and June 1940

Type	Number	Minnows present	Minnows present		Minnows absent		Estimated number of minnows observed
			Larvae absent	Larvae present	Larvae absent	Larvae present	
Cisterns.....	1,708	839	833	6	477	392	9,450
Wells.....	596	264	263	1	116	216	756
Rain barrels.....	72	2	1	1	46	24	4
Total.....	2,376	1,105	1,097	8	639	632	10,210

The effectiveness of the *Gambusia* minnows in controlling mosquito larvae in cisterns was demonstrated very clearly. Mosquito larvae were seen in only 6 cisterns out of 839 in which fish were observed.



FIGURE 1 (above) and FIGURE 2 (below).—Cisterns unprotected against *Aedes aegypti* production. These are typical of many cisterns that were stocked with *Gambusia holbrooki* minnows. Note the condition of the yards. Inspectors instructed householders to turn upside down all dishpans, washtubs, etc., when they were not in use.

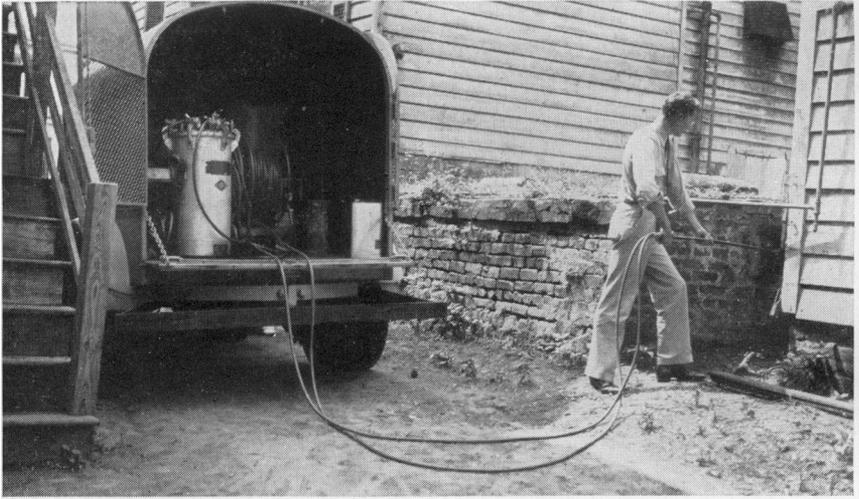


FIGURE 3.—Unused cistern that is not mosquito-tight. Kerosene spray is being applied to the water surface through a small opening in the wall. *Gambusia* minnows will be introduced later.



FIGURE 4.—Inspector using a hand mirror to reflect sunlight into water to aid in looking for mosquito larvæ and for minnows. This is far superior to using a flashlight.

Likewise, only 1 well out of 264 containing fish was found to have mosquito larvae in it.

It is worth noting that, where no fish could be found, mosquito larvae were present in 392 of 869 cisterns, 216 of 332 wells, and 24 of 70 rain barrels.

#### SUMMARY

The top-feeding minnow, *Gambusia holbrooki*, obtained locally, was used successfully to control *Aedes aegypti* mosquitoes in their larval stage in drinking water cisterns and in wells. These cisterns are the principal source of this species of mosquitoes in Key West.

Where cisterns contained a heavy infestation of mosquito larvae they were sprayed with kerosene first and the *Gambusia* were introduced later.

Before the fish were introduced into a cistern they were placed overnight in chlorinated water to cleanse them.

#### CONCLUSION

Using *Gambusia holbrooki* minnows is a more enduring method of mosquito control for cisterns than oiling the water surface at intervals. Benefits from oiling cease if it is not continued at regular intervals, while fish will reproduce and will operate indefinitely unless disease, natural enemies, carelessness in emptying cisterns, or other unforeseen causes lead to their extermination.

#### ACKNOWLEDGEMENTS

The careful work of those members of the *Aedes Aegypti* Control Unit who inspected, stocked, and restocked the many water containers in Key West is acknowledged. The cooperation of Mr. Z. D. Harrison, Monroe County sanitary officer, in furnishing advice and assistance whenever needed cannot be acknowledged too gratefully.

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- (1) The Use of Fish for Mosquito Control. International Health Board, Rockefeller Foundation, 1924.
- (2) Connor, M. E.: Fish as mosquito destroyers. *Natural History*, 21: 279-281 (1921).
- (3) Molloy, D. M.: Some personal experiences with fish as antimosquito agencies in the Tropics. *Am. J. Trop. Med.*, 4: 175-194 (1924).
- (4) Jackson, C. E.: Communication from U. S. Bureau of Fisheries, Washington, D. C., February 16, 1939.
- (5) Williams, L. L., Jr.: Communication from National Institute of Health, Malaria Investigations, Washington, D. C., November 12, 1938.
- (6) Harrison, Z. D.: Private communication, December 11, 1939.

**COURT DECISION ON PUBLIC HEALTH**

*City ordinance prescribing hours for sale of uncured or uncooked meats upheld.*—(California District Court of Appeal, Fourth District; *Justesen's Food Stores, Inc., v. City of Tulare et al.*, 111 P.2d 424; decided March 22, 1941.) An ordinance of the city of Tulare made it unlawful to sell or offer for sale any uncured or uncooked meats except between the hours of 7:30 a. m. and 6 p. m. on days other than Saturday, Sunday, and certain specified holidays and except between the hours of 7:30 a. m. and 9 p. m. on Saturday. It was also made unlawful to keep, or permit to be kept, open for business any establishment selling uncured or uncooked meats or to receive at such establishment any such meats or to remove therefrom any such meats for sale or delivery, except between the hours above stated. If any other business was carried on in the same room and it was desired to operate such business on the days or during the hours prohibited to the meat business, it was required that a permanent partition not less than 7 feet in height should enclose and separate the place where such other business was carried on from the remaining part of the room where the meat business was conducted.

The plaintiff, which was engaged in the ordinary general grocery store business, brought an action to obtain an injunction against the enforcement of the above-mentioned provisions of the city ordinance. From a judgment of the lower court dismissing the action the plaintiff appealed to the district court of appeal, contending that the ordinance contravened the Federal and State constitutions in that it deprived the plaintiff of its liberty and property without due process of law. The appellate court was of the view that the challenged ordinance was valid. Relative to the provisions concerning hours, it was said that, in order to make inspections efficacious in the protection of the public health, it was necessary and reasonable to make regulations to insure that meat markets and butcher shops should not be open except at specified reasonable hours. With respect to the section relating to the separation by a partition of different businesses, the court said that it was a legitimate exercise of the police power and not unreasonable. In closing its opinion the court stated the rule regarding the due process of law clause, enunciated in a prior State case, to the effect that, when the necessity or propriety of an enactment is a question upon which reasonable minds might differ, the propriety and necessity of such an enactment was a matter of legislative determination.

**DEATHS DURING WEEK ENDED MAY 24, 1941**

[From the Weekly Mortality Index, issued by the Bureau of the Census, Department of Commerce]

	Week ended May 24, 1941	Correspond- ing week, 1940
<b>Data from 87 large cities of the United States:</b>		
Total deaths.....	8, 295	8, 251
Average for 3 prior years.....	8, 124	-----
Total deaths, first 21 weeks of year.....	190, 304	191, 373
Deaths per 1,000 population, first 21 weeks of year, annual rate.....	12.7	12.8
Deaths under 1 year of age.....	523	493
Average for 3 prior years.....	493	-----
Deaths under 1 year of age, first 21 weeks of year.....	11, 107	10, 683
<b>Data from industrial insurance companies:</b>		
Policies in force.....	64, 482, 605	65, 481, 168
Number of death claims.....	11, 779	12, 309
Death claims per 1,000 policies in force, annual rate.....	9.5	9.8
Death claims per 1,000 policies, first 21 weeks of year, annual rate.....	10.4	10.5

# PREVALENCE OF DISEASE

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*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

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## UNITED STATES

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### REPORTS FROM STATES FOR WEEK ENDED MAY 31, 1941

#### Summary

As compared with the preceding week, increased incidence was reported for the current week for only 3 of the 9 communicable diseases included in the following weekly table, namely, influenza, smallpox, and typhoid fever. The number of reported cases of measles dropped from 35,044 to 26,221, decreases being recorded in all geographic areas.

The total number of cases of poliomyelitis dropped from 27 to 20; and of these, 5 cases were reported in Florida and 7 in California. To date (first 22 weeks) 511 cases have been reported for the United States as a whole, of which Florida has reported 68, California 42, Texas 23, and New York 22. The number of cases reported so far this year exceeds the 5-year (1936-40) cumulative median expectancy (468) and the number of cases reported for the corresponding period of each of the 5 preceding years except 1940 (546 cases).

Three cases of Rocky Mountain spotted fever were reported in the Atlantic States and 20 cases in the Mountain States. Of 22 cases of endemic typhus fever, 8 cases were reported in Texas, 6 in Georgia, and 4 in Florida.

Information received during the current week states that several cases of encephalitis, with at least 2 deaths, were reported in Cameron County, Tex., where an epidemic of equine encephalomyelitis had caused the death of 70 horses.

The death rate for the week ended May 31, 1941, for 87 major cities in the United States, as reported by the Bureau of the Census, dropped from 11.6 per 1,000 population for the preceding week to 10.9, the same as the 3-year (1938-40) average for the corresponding week. The cumulative rate for the first 22 weeks of the current year is 12.6, as compared with 12.7 for the corresponding period of 1940 (all rates are on an annual basis).

*Telegraphic morbidity reports from State health officers for the week ended May 31, 1941, and comparison with corresponding week of 1940 and 5-year median*

In these tables a zero indicates a definite report, while leaders imply that, although none were reported cases may have occurred.

Division and State	Diphtheria			Influenza			Measles			Meningitis, meningococcus		
	Week ended		Median 1936-40	Week ended		Median 1936-40	Week ended		Median 1936-40	Week ended		Median 1936-40
	May 31, 1941	June 1, 1940		May 31, 1941	June 1, 1940		May 31, 1941	June 1, 1940		May 31, 1941	June 1, 1940	
<b>NEW ENG.</b>												
Maine.....	1	0	0				76	344	105	0	0	0
New Hampshire.....	0	0	0				23	11	11	0	0	0
Vermont.....	0	0	0				23	2	79	0	0	0
Massachusetts.....	4	3	3				790	1,185	976	1	1	2
Rhode Island.....	0	0	0				0	193	81	1	0	0
Connecticut.....	0	0	0	1	1	1	397	26	149	0	0	0
<b>MID. ATL.</b>												
New York.....	9	15	20	1	6	6	2,731	919	2,150	7	1	5
New Jersey <sup>1</sup> .....	9	4	7	1	4	4	1,223	990	724	0	0	1
Pennsylvania <sup>2</sup> .....	16	14	24				4,664	454	1,560	2	2	8
<b>E. NO. CEN.</b>												
Ohio.....	4	8	15	6	38	22	1,716	43	608	0	1	5
Indiana.....	10	5	7	11	4	6	727	22	22	0	0	0
Illinois.....	16	13	31	9	18	15	1,248	163	163	1	1	2
Michigan <sup>1</sup> .....	2	1	6	1	11	2	1,639	610	403	1	2	2
Wisconsin.....	0	2	2	9	19	23	1,634	1,005	743	0	0	0
<b>W. NO. CEN.</b>												
Minnesota.....	0	1	4	3	1	1	22	46	216	0	0	0
Iowa.....	4	1	2	1		2	135	145	145	0	0	0
Missouri.....	1	2	5		1	6	472	53	53	1	0	1
North Dakota.....	1	1	0			6	22	5	5	0	1	1
South Dakota.....	0	0	0				4	0	0	1	0	0
Nebraska.....	4	6	2				33	17	64	0	1	0
Kansas.....	10	1	3	2	1	1	358	407	58	0	0	0
<b>SO. ATL.</b>												
Delaware.....	0	0	0				80	1	17	0	0	0
Maryland <sup>1,2</sup> .....	0	1	2	4	1	2	411	4	129	1	0	1
Dist. of Columbia.....	1	3	4				204	2	110	1	0	0
Virginia <sup>1</sup> .....	8	3	8	71	48	48	919	227	379	2	1	1
West Virginia <sup>1</sup> .....	3	3	5		5	11	502	15	48	0	1	3
North Carolina <sup>1</sup> .....	10	8	8		6	1	1,294	157	309	0	0	1
South Carolina.....	7	9	2	192	128	77	670	20	64	1	1	1
Georgia <sup>1</sup> .....	1	3	3	12	14		272	73	73	0	1	0
Florida <sup>1</sup> .....	4	6	6	14		3	315	116	44	0	0	1
<b>E. SO. CEN.</b>												
Kentucky.....	2	2	4		49	3	610	79	79	1	0	3
Tennessee.....	4	3	3	10	19	20	365	153	104	0	0	3
Alabama <sup>1</sup> .....	6	4	6	31	14	27	276	89	89	4	3	3
Mississippi <sup>1</sup> .....	2	3	3							1	0	0
<b>W. SO. CEN.</b>												
Arkansas.....	2	3	3	7	6	12	215	108	28	0	0	0
Louisiana.....	0	5	5	1	19	6	17	3	27	1	1	0
Oklahoma.....	5	3	6	17	10	22	127	15	48	0	1	0
Texas <sup>1</sup> .....	17	15	30	389	121	121	900	1,058	389	8	0	7
<b>MOUNTAIN</b>												
Montana <sup>1</sup> .....	0	0	0		6		24	31	31	0	0	1
Idaho.....	0	0	0				37	37	25	0	0	0
Wyoming <sup>1</sup> .....	1	0	0				13	24	16	0	1	0
Colorado.....	6	9	6	17	8		379	43	44	0	0	0
New Mexico.....	0	1	1			1	81	58	52	0	0	0
Arizona.....	0	2	1	50	40	27	59	35	33	1	0	0
Utah <sup>1,2</sup> .....	0	0	0	1			28	479	86	0	0	0
Nevada.....	0						0					
<b>PACIFIC</b>												
Washington.....	0	1	1				21	320	320	1	0	0
Oregon.....	1	4	1	7	5	11	79	345	74	0	0	0
California <sup>1</sup> .....	5	15	21	1,203	19	34	386	354	624	1	0	2
<b>Total</b> .....	<b>176</b>	<b>183</b>	<b>332</b>	<b>2,071</b>	<b>622</b>	<b>622</b>	<b>26,221</b>	<b>10,484</b>	<b>12,783</b>	<b>38</b>	<b>20</b>	<b>51</b>
<b>22 weeks</b> .....	<b>5,836</b>	<b>7,032</b>	<b>10,330</b>	<b>590,928</b>	<b>164,674</b>	<b>147,113</b>	<b>722,223</b>	<b>172,434</b>	<b>218,257</b>	<b>1,059</b>	<b>878</b>	<b>1,600</b>

See footnotes at end of table.

Telegraphic morbidity reports from State health officers for the week ended May 31, 1941, and comparison with corresponding week of 1940 and 5-year median—Con.

Division and State	Poliomyelitis			Scarlet fever			Smallpox			Typhoid and paratyphoid fever		
	Week ended		Median 1936-40	Week ended		Median 1936-40	Week ended		Median 1936-40	Week ended		Median 1936-40
	May 31, 1941	June 1, 1940		May 31, 1941	June 1, 1940		May 31, 1941	June 1, 1940		May 31, 1941	June 1, 1940	
<b>NEW ENG.</b>												
Maine.....	0	0	0	3	10	10	0	0	0	0	0	1
New Hampshire.....	0	0	0	3	1	5	0	0	0	0	0	0
Vermont.....	0	0	0	10	2	6	0	0	0	0	0	0
Massachusetts.....	0	0	0	134	101	179	0	0	0	13	4	1
Rhode Island.....	0	0	0	1	4	23	0	0	0	0	0	0
Connecticut.....	0	0	0	39	52	52	0	0	0	0	4	2
<b>MID. ATL.</b>												
New York.....	1	0	1	389	661	566	0	0	0	7	4	4
New Jersey <sup>1</sup> .....	0	0	0	144	284	131	0	0	0	1	2	2
Pennsylvania <sup>2</sup> .....	0	1	0	339	271	292	0	0	0	6	9	7
<b>E. NO. CEN.</b>												
Ohio.....	0	2	0	232	369	267	0	0	2	2	9	8
Indiana.....	0	0	0	81	87	87	0	1	22	0	5	1
Illinois.....	0	0	0	179	650	401	4	9	15	2	2	5
Michigan <sup>1</sup> .....	0	0	0	182	238	271	7	0	1	1	0	2
Wisconsin.....	0	0	0	89	109	144	2	3	2	1	1	1
<b>W. NO. CEN.</b>												
Minnesota.....	0	0	0	48	55	78	0	7	16	0	0	0
Iowa.....	1	1	0	16	22	64	8	3	22	3	0	0
Missouri.....	0	0	0	81	38	91	2	0	28	4	10	8
North Dakota.....	0	0	0	0	2	16	0	0	11	0	4	2
South Dakota.....	1	0	0	9	2	15	3	1	14	0	2	0
Nebraska.....	0	0	0	15	6	14	0	1	4	0	0	0
Kansas.....	0	0	0	24	42	57	0	1	9	2	2	1
<b>SO. ATL.</b>												
Delaware.....	0	0	0	16	2	2	0	0	0	0	0	0
Maryland <sup>1,2</sup> .....	0	0	0	46	33	33	0	0	0	3	1	2
Dist. of Col.....	0	0	0	11	20	11	0	0	0	0	1	1
Virginia <sup>3</sup> .....	0	0	0	17	36	23	0	0	0	7	0	6
West Virginia <sup>1</sup> .....	0	0	0	50	20	26	0	0	0	5	3	5
North Carolina <sup>4</sup> .....	0	0	1	9	20	18	0	0	1	1	4	7
South Carolina.....	0	1	1	4	1	5	0	0	0	2	3	8
Georgia <sup>4</sup> .....	0	0	0	9	10	6	0	0	0	4	11	11
Florida <sup>4</sup> .....	5	0	0	1	5	4	0	1	0	2	3	2
<b>E. SO. CEN.</b>												
Kentucky.....	0	0	0	59	37	19	3	1	1	5	5	5
Tennessee.....	1	0	0	44	44	31	3	3	3	2	20	9
Alabama <sup>4</sup> .....	0	0	0	20	7	6	0	4	0	3	2	4
Mississippi <sup>1</sup> .....	1	1	0	1	5	2	1	0	0	1	1	2
<b>W. SO. CEN.</b>												
Arkansas.....	1	0	0	4	11	4	5	4	4	2	4	10
Louisiana.....	0	1	1	2	7	6	0	1	0	13	7	10
Oklahoma.....	1	0	0	9	10	19	2	1	8	1	5	7
Texas <sup>4</sup> .....	1	2	2	21	19	50	0	3	7	13	8	12
<b>MOUNTAIN</b>												
Montana <sup>3</sup> .....	0	0	0	7	5	12	0	0	5	0	1	1
Idaho.....	0	3	0	7	4	6	0	0	1	0	1	1
Wyoming <sup>3</sup> .....	0	0	0	2	3	7	0	1	1	0	0	0
Colorado.....	0	0	0	13	22	33	0	1	3	1	2	1
New Mexico.....	0	0	0	1	2	9	0	0	0	1	0	0
Arizona.....	0	0	0	6	0	5	0	0	0	1	0	1
Utah <sup>1,2</sup> .....	0	0	0	5	9	14	0	0	0	0	0	0
Nevada.....	0	0	0	0	0	0	0	0	0	0	0	0
<b>PACIFIC</b>												
Washington.....	0	25	0	14	40	29	0	0	3	6	2	1
Oregon.....	0	1	1	4	6	19	1	0	7	1	0	2
California <sup>4</sup> .....	7	9	6	60	92	155	1	1	2	6	5	7
Total.....	29	47	36	2,460	3,476	3,476	42	47	242	122	147	192
22 weeks.....	511	546	468	79,226	104,165	120,897	998	1,545	6,750	1,812	1,958	2,606

See footnotes at end of table.

Telegraphic morbidity reports from State health officers for the week ended May 31, 1941, and comparison with corresponding week of 1940—Con.

Division and State	Whooping cough		Division and State	Whooping cough	
	Week ended—			Week ended—	
	May 31, 1941	June 1, 1940		May 31, 1941	June 1, 1940
<b>NEW ENG.</b>			<b>SO. ATL.—continued</b>		
Maine.....	25	12	South Carolina.....	234	24
New Hampshire.....	5	16	Georgia <sup>4</sup> .....	24	17
Vermont.....	11	7	Florida <sup>4</sup> .....	33	2
Massachusetts.....	203	130	<b>E. SO. CEN.</b>		
Rhode Island.....	24	0	Kentucky.....	65	72
Connecticut.....	47	33	Tennessee.....	100	33
<b>MID. ATL.</b>			Alabama.....	123	11
New York.....	215	343	Mississippi <sup>1</sup> .....		
New Jersey <sup>1</sup> .....	73	58	<b>W. SO. CEN.</b>		
Pennsylvania <sup>2</sup> .....	316	238	Arkansas.....	43	15
<b>E. NO. CEN.</b>			Louisiana.....	2	48
Ohio.....	235	289	Oklahoma.....	15	10
Indiana.....	47	16	Texas <sup>4</sup> .....	374	391
Illinois.....	101	50	<b>MOUNTAIN</b>		
Michigan <sup>1</sup> .....	290	217	Montana <sup>3</sup> .....	12	4
Wisconsin.....	113	60	Idaho.....	11	12
<b>W. NO. CEN.</b>			Wyoming <sup>3</sup> .....	7	1
Minnesota.....	68	41	Colorado.....	187	20
Iowa.....	29	26	New Mexico.....	13	14
Missouri.....	64	28	Arizona.....	18	42
North Dakota.....	10	5	Utah <sup>1,3</sup> .....	51	147
South Dakota.....	7	8	Nevada.....	0	
Nebraska.....	17	12	<b>PACIFIC</b>		
Kansas.....	146	30	Washington.....	126	41
<b>SO. ATL.</b>			Oregon.....	17	36
Delaware.....	0	6	California <sup>4</sup> .....	568	385
Maryland <sup>1,2</sup> .....	95	81	<b>Total.....</b>		
Dist. of Col.....	10	8	<b>4,478</b>		<b>3,292</b>
Virginia <sup>3</sup> .....	53	68	<b>22 weeks.....</b>		<b>101,101</b>
West Virginia <sup>1</sup> .....	29	83			<b>69,784</b>
North Carolina <sup>4</sup> .....	222	107			

<sup>1</sup> Period ended earlier than Saturday.

<sup>2</sup> New York City only.

<sup>3</sup> Rocky Mountain spotted fever, week ended May 31, 1941, 23 cases as follows: Pennsylvania, 1; Maryland, 1; Virginia, 1; Montana, 13; Wyoming, 6; Utah, 1.

<sup>4</sup> Typhus fever, week ended May 31, 1941, 22 cases as follows: North Carolina, 1; Georgia, 6; Florida, 4; Alabama, 2; Texas, 8; California, 1.

<sup>5</sup> Mostly delayed reports.

**PLAGUE INFECTION IN CALIFORNIA****IN FLEAS IN KERN COUNTY**

Under date of May 24, 1941, N. E. Wayson, Medical Officer in Charge, Plague Suppressive Measures, San Francisco, Calif., reported plague infection proved by animal inoculation and cultures, in 298 fleas from 20 *beecheyi* squirrels, submitted to the laboratory April 29, 1941; in 64 fleas from 11 *beecheyi* squirrels submitted to the laboratory April 29; and in 46 fleas from 3 *beecheyi* squirrels submitted to the laboratory May 14, 1941, all from the J. McKenzie Ranch, 7 miles south and 5 miles west of Tehachapi, Kern County, Calif.

**PLAGUE INFECTION IN IDAHO****IN FLEAS IN CANYON COUNTY AND PAYETTE COUNTY**

Under date of May 23, 1941, N. E. Wayson, Medical Officer in Charge, Plague Suppressive Measures, San Francisco, Calif., reported plague infection proved positive upon laboratory examination in fleas from 22 ground squirrels shot May 14, 1941, 7 miles north of Parma, on U. S. Highway 95, Canyon County, and in another lot of fleas from 13 ground squirrels shot May 14, 1941, 5 to 6 miles north of the junction of U. S. Highway 95 and State Highway No. 49, on U. S. Highway No. 95, Payette County, Idaho.

**CASE OF PSITTACOSIS IN OAK PARK, ILLINOIS**

According to a report received from Dr. Roland R. Cross, director of the Illinois State Department of Health, a case of psittacosis occurred in Oak Park, Ill., on March 28, 1941. The infection was apparently contracted from love birds. Three birds, purchased by the patient in Chicago, died within a period of 2 or 3 months, the last one dying on April 5. The patient recovered.

## WEEKLY REPORTS FROM CITIES

City reports for week ended May 17, 1941

This table summarizes the reports received weekly from a selected list of 140 cities for the purpose of showing a cross section of the current urban incidence of the communicable diseases listed in the table.

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Smallpox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Data for 90 cities: 5-year average...	114	76	33	4,754	492	1,819	17	374	24	1,200	-----
Current week <sup>1</sup>	43	44	15	10,261	307	1,381	2	389	21	1,543	-----
<b>Maine:</b>											
Portland	0		0	2	3	1	0	0	0	17	22
<b>New Hampshire:</b>											
Concord	0		0	1	0	0	0	1	0	0	12
Manchester	0		0	0	1	0	0	1	0	0	10
Nashua	0		0	0	0	0	0	0	0	12	10
<b>Vermont:</b>											
Barre					0	0	0	0	0	0	9
Burlington	0		0	1	0	0	0	0	0	0	5
Rutland	0		0	0	0	0	0	0	0	0	
<b>Massachusetts:</b>											
Boston	0		0	273	5	91	0	8	2	39	175
Fall River	0		0	1	2	5	0	0	0	3	29
Springfield	0		0	35	0	14	0	1	0	12	24
Worcester	0		0	25	5	12	0	0	1	6	56
<b>Rhode Island:</b>											
Pawtucket	0		0	0	0	6	0	0	0	2	18
Providence	0		0	4	1	3	0	0	0	23	54
<b>Connecticut:</b>											
Bridgeport	0		0	29	1	4	0	2	0	0	32
Hartford	0		0	4	1	6	0	2	0	7	46
New Haven	0		0	4	1	11	0	0	0	7	31
<b>New York:</b>											
Buffalo	0		0	83	8	46	0	4	0	25	114
New York	16	4	1	2,216	47	276	0	86	4	84	1,408
Rochester	0		0	276	1	2	0	2	0	12	67
Syracuse	0		0	3	0	4	0	0	0	7	46
<b>New Jersey:</b>											
Camden	2		0	14	1	14	0	0	1	3	23
Newark	0	3	1	110	8	45	0	6	0	13	95
Trenton	0	2	0	40	0	17	0	2	0	0	31
<b>Pennsylvania:</b>											
Philadelphia	1	1	1	772	15	151	0	24	2	88	445
Pittsburgh	0		0	1,245	10	17	0	6	0	46	143
Reading	0		0	99	1	13	0	2	1	6	27
Scranton	0			40		0	0		0	2	
<b>Ohio:</b>											
Cincinnati	0		0	75	1	8	0	6	0	2	109
Cleveland	2	4	1	73	8	71	0	12	0	75	187
Columbus	0	1	1	50	3	13	0	2	0	15	88
Toledo	0		0	468	2	5	0	6	0	36	54
<b>Indiana:</b>											
Anderson	0		0	13	0	0	0	0	0	0	12
Fort Wayne	0		0	35	3	0	0	0	0	5	28
Indianapolis	0		1	682	8	13	0	3	0	11	103
Muncie	0		0	36	2	7	0	0	0	0	11
South Bend	0		0	33	4	1	0	0	0	0	18
Terre Haute	0		0	4	0	0	0	0	0	0	20
<b>Illinois:</b>											
Alton	0		0	2	2	3	0	0	0	0	8
Chicago	2		1	307	14	149	0	44	0	40	673
Elgin	0		0	12	1	2	0	0	0	0	5
Moline	0		0	19	0	0	0	0	0	0	6
Springfield	0		0	30	3	7	0	0	0	1	28
<b>Michigan:</b>											
Detroit	1		0	498	12	134	0	22	0	137	258
Flint	0		0	62	2	3	0	0	0	10	25
Grand Rapids	1		0	229	1	7	0	0	0	9	26
<b>Wisconsin:</b>											
Kenosha	0		0	88	0	2	0	0	0	0	9
Madison	0		0	34	0	4	0	0	0	3	20
Milwaukee	1		0	637	2	25	0	2	0	37	95
Racine	2		0	20	1	5	0	0	0	2	13
Superior	0		0	1	0	0	0	0	0	12	7
<b>Minnesota:</b>											
Duluth	0		0	1	1	0	0	0	0	29	20
Minneapolis	1		0	10	5	21	0	0	0	27	101
St. Paul	0		0	0	4	11	0	1	0	20	63

<sup>1</sup> Figures for Barre, Shreveport, and San Antonio estimated; reports not received.



## City reports for week ended May 17, 1941—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small-pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
<b>Oklahoma:</b>											
Oklahoma City	0	0	0	17	5	1	0	1	1	2	47
Tulsa	0	0	0	66	3	3	0	1	0	8	16
<b>Texas:</b>											
Dallas	1	0	0	38	1	3	0	3	0	4	61
Fort Worth	0	1	16	1	1	0	0	0	0	5	53
Galveston	0	0	0	0	0	2	0	1	0	0	14
Houston	0	0	1	6	1	0	0	11	0	21	101
San Antonio											
<b>Montana:</b>											
Billings	0	0	0	0	1	2	0	1	0	1	7
Great Falls	0	0	0	1	1	1	0	1	0	0	8
Helena	0	0	3	0	0	0	0	0	0	0	4
Missoula	0	0	0	0	1	0	0	0	0	0	8
<b>Idaho:</b>											
Boise	0	0	0	7	0	1	0	0	0	0	5
<b>Colorado:</b>											
Colorado Springs	0	0	0	2	0	4	0	0	0	5	14
Denver	3	5	0	443	5	2	0	2	0	154	78
Pueblo	0	0	0	0	1	0	0	1	0	0	8
<b>New Mexico:</b>											
Albuquerque	0	0	0	36	1	0	0	2	0	2	13
<b>Arizona:</b>											
Phoenix	0	32	0	3	0	0	0	0	0	10	
<b>Utah:</b>											
Salt Lake C'ty.	1	0	0	8	3	3	0	0	0	23	40
<b>Washington:</b>											
Seattle	1	0	0	0	2	2	0	0	0	47	91
Spokane	0	0	11	1	1	3	0	0	0	4	34
Tacoma	0	0	0	0	0	2	0	2	0	7	36
<b>Oregon:</b>											
Portland	1	1	1	5	2	3	0	0	0	1	76
Salem	0	0	0	2	0	0	0	0	0	0	
<b>California:</b>											
Los Angeles	0	9	1	87	7	18	0	19	0	70	344
Sacramento	3	1	0	4	2	1	0	0	0	32	37
San Francisco	1	3	0	20	6	8	0	4	0	66	149

State and city	Meningitis, meningococcus		Polio-myelitis cases	State and city	Meningitis, meningococcus		Polio-myelitis cases
	Cases	Deaths			Cases	Deaths	
<b>Massachusetts:</b>				<b>Missouri:</b>			
Worcester	0	1	0	Kansas City	1	0	0
<b>New York:</b>				<b>Maryland:</b>			
Buffalo	1	0	0	Baltimore	2	0	0
New York	4	3	0	<b>Florida:</b>			
<b>Pennsylvania:</b>				Miami	0	0	1
Philadelphia	0	0	1	<b>Tennessee:</b>			
Pittsburgh	1	0	0	Knoxville	0	1	0
<b>Indiana:</b>				<b>Alabama:</b>			
Indianapolis	1	2	0	Birmingham	1	0	0
<b>Illinois:</b>				<b>Arizona:</b>			
Chicago	1	0	0	Phoenix	0	0	3
<b>Michigan:</b>							
Detroit	0	1	0				

*Encephalitis, epidemic or lethargic.*—Cases: New York, 1; San Francisco, 1. Deaths: Cleveland, 1.

*Pellagra.*—Cases: Birmingham, 1.

*Rabies in man.*—Deaths: Pittsburgh, 1; Cincinnati, 1.

*Typhus fever.*—Cases: New York, 1; Savannah, 1; Miami, 1; Tampa, 1; Mobile, 1; Los Angeles, 1.

## TERRITORIES AND POSSESSIONS

## HAWAII TERRITORY

*Plague (rodent).*—A rat found on May 1, 1941, and another rat found on May 2, at Kalopa Camp, Hamakua District, Island of Hawaii, T. H., have been proved positive for plague.

# FOREIGN REPORTS

## CANADA

*Provinces—Communicable diseases—Week ended May 3, 1941.*—During the week ended May 3, 1941, cases of certain communicable diseases were reported by the Department of Pensions and National Health of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Cerebrospinal meningitis.....		9	1	7	8	1		1	2	29
Chickenpox.....		34	1	209	164	20	15	24	51	518
Diphtheria.....		15	1	13	16	1	2	1	3	52
Dysentery.....				8					1	4
Influenza.....		18			31	1			6	56
Measles.....	3	99	11	642	1,431	74	44	130	478	2,812
Mumps.....				330	346	33	24	19	34	796
Pneumonia.....		20			8	1			7	36
Scarlet fever.....		28	11	120	170	4	6	11	16	366
Tuberculosis.....	2	8	12	139	48	2				211
Typhoid and paratyphoid fever.....				12	3				1	16
Whooping cough.....		2		75	167	1	2	4	38	289

## JAMAICA

*Notifiable diseases—4 weeks ended May 10, 1941.*—During the 4 weeks ended May 10, 1941, cases of certain notifiable diseases were reported in Kingston, Jamaica, and in the island outside of Kingston, as follows:

	Kingston	Other localities		Kingston	Other localities
Cerebrospinal meningitis.....		1	Pollomyelitis.....	1	
Chickenpox.....	7	24	Puerperal fever.....		1
Diphtheria.....	1	5	Scarlet fever.....	1	1
Dysentery.....	5	2	Tuberculosis.....	20	63
Erysipelas.....		2	Typhoid fever.....	2	34
Leprosy.....		4			

## REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

NOTE.—A cumulative table giving current information regarding the world prevalence of quarantinable diseases appeared in the PUBLIC HEALTH REPORTS of May 30, 1941, pages 1187-1189. A similar table will appear in future issues of the PUBLIC HEALTH REPORTS for the last Friday of each month.

### Cholera

*China—Canton.*—A report dated May 21, 1941, stated that up to May 19, 1941, 52 cases of cholera with 27 deaths had been reported in Canton, China.

### Smallpox

*Ceylon—Colombo.*—A report dated May 16, 1941, from the American Consul at Colombo, Ceylon, stated that within the last few weeks 20 cases of smallpox had occurred in the city of Colombo and 12 cases outside the city.